

### General Engineering Services Contract Amendment

**January 24, 2018** 



### **Purpose**

- The original request for an increase in the General Engineering Contract (GEC) was for \$17,930,809, from \$46,842,849 to \$64,773,658, for continued and expanded scope in support of Task 01 Scheduling & Estimating Services, Task 03 Environmental & Planning, and Task 04 Design Management & Services.
- At the December 14, 2017 HART Board Meeting, an amendment was proposed for \$3,000,000 and approved by the HART Board. This request is for the remaining \$14,930,809.
- This increase will cover additional past and future services requested for tasks to the end of the contract in April, 2019.



### **Background**

- CH2M Hill was awarded the General Engineering Services contract on December 5, 2013 for \$46,143,277.
- The contract was for five (5) years and four (4) months and will run through April 5, 2019.
- Since then, three (3) amendments have been issued for a total cost of \$699,572.
   The amendments were for Rapid Transit Stabilization Agreements and Bus/Rail Integration Planning.
- There is an amendment being processed now for \$3,000,000.
- The current value of the contract is now \$46,842,849.
- The contract scope was defined in five (5) tasks.



Task 01 – Scheduling and Estimating Support (Level of Effort)

Tasks include project management support services to provide project control procedures, management of the Management Information System, management of reports for FTA submittal, scope control and Work Breakdown Structure, schedule control, review of contractor schedule and pay requests, cost control services and estimating services.

Task 02 – Interface Management and Coordination (Level of Effort)

Tasks include to maintain the Project Interface Plan, the process improvements list, the Project Interface Control Manual, HART's Interface Management Plan and the Interface Management Coordination Procedures.

 Task 03 – Environmental and Planning (Level of Effort plus Specialized Sub-Consultants)

Tasks include environmental planning, environmental compliance, general planning support, travel demand forecasting, bus/rail integration planning station access and modal interface planning, land use planning, transit oriented development planning, traffic analysis, GIS and mapping, archaeological and cultural resources and support for right of way, utilities and environmental/planning.

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#### Task 04 – Design Management Services (Level of Effort)

Tasks include management of final design services, final design submittal review, refine conceptual designs, update project baseline documents, system-wide signage, final design of landscaping, traffic analyses, floodway and flood plain evaluation, intelligent transportation systems support, renderings/drawings for public outreach, support interface and integration and support third party and utility agreements, design support for design-build construction, design support for elevators and escalators and additional design and design studies.

#### Task 05 – Program Management and Deliverables

Tasks include the GEC's Program Management Services and the GEC's transition plan, work breakdown structure, budget staffing plan, monthly progress and status reports, and contract administration.

### **Assumptions at time of Contract**

- Revenue Service March 2019.
- 6 Design-Bid-Build Contract Packages: Westside Stations Group; Airport Guideway; City Center Guideway; Airport Stations; Dillingham Kaka'ako Stations; and Pearl Highlands Parking Structure and Bus Transit Center.
- Programmatic Agreement support activities performed by in-house staff.



# Original Contract Overview Planned-to-Actual (FTE)

| Year | Planned FTE | Actual FTE | Over/(Under) |
|------|-------------|------------|--------------|
| 2014 | 32          | 37         | 5            |
| 2015 | 25          | 34         | 9            |
| 2016 | 21          | 31         | 10           |
| 2017 | 16          | 27         | 11           |



# Original Contract Overview Task 01 Scheduling & Estimating

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs) |
|------|--------------------|-------------------|---------------------------------|--------------------------------|
| 2014 | 14,668             | 8                 | 14,191                          | 7                              |
| 2015 | 13,776             | 7                 | 15,355                          | 8                              |
| 2016 | 13,344             | 7                 | 13,757                          | 7                              |
| 2017 | 11,344             | 6                 | 15,095                          | 8                              |



# Original Contract Overview Task 02 Interface Management & Coordination

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs) |
|------|--------------------|-------------------|---------------------------------|--------------------------------|
| 2014 | 6,502              | 3                 | 6,031                           | 3                              |
| 2015 | 6,482              | 3                 | 3,706                           | 2                              |
| 2016 | 5,258              | 3                 | 2,994                           | 2                              |
| 2017 | 4,298              | 2                 | 2,257                           | 1                              |



# Original Contract Overview Task 03 Environmental & Planning

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs)* |
|------|--------------------|-------------------|---------------------------------|---------------------------------|
| 2014 | 8,911              | 5                 | 19,211                          | 10                              |
| 2015 | 7,694              | 4                 | 16,650                          | 9                               |
| 2016 | 6,184              | 3                 | 14,715                          | 8                               |
| 2017 | 3,416              | 2                 | 11,839                          | 6                               |

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<sup>\*</sup>Actual/Projected (FTEs) include Subconsultant level of effort

#### Task 03 Overruns

Need to satisfy Programmatic Agreement stipulations greater than anticipated.

- NHRPs.
- Additional PA Support Historic context studies, architectural historian, etc.
- Preparation of HALS, National Historic Landmark support, National Historic Places Registration, etc.
- Transportation modeling, Post-ROD Environmental support.
- AIS Support including SAIS, data recovery, curation, data recovery.



# Original Contract Overview Task 04 Design Management & Services

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs) |
|------|--------------------|-------------------|---------------------------------|--------------------------------|
| 2014 | 29,946             | 15                | 31,523                          | 16                             |
| 2015 | 19,848             | 10                | 29,344                          | 15                             |
| 2016 | 11,991             | 6                 | 27,282                          | 14                             |
| 2017 | 9,560              | 5                 | 22,840                          | 12                             |



#### Task 04 Overruns

- Airport & City Center Design-Bid-Build approach replaced by Design-Build (impacts Task 04 - Design Mgmt & Services).
  - Technical oversight of submittals and resolution of issues
  - Create new procurement documents, respond to RFIs & Alternative Technical Concepts (ATCs), Evaluate Technical proposals
  - Additional Hydrologic, Hydraulic & Scour Analyses
  - Additional Design Studies
  - Grounding/Corrosion Control
  - Additional Hydrologic, Hydraulic & Scour Analyses
- Traffic Engineering support Review MOT Plans, design submittals, provide HDOT contract oversight.
- On-Call Contractor Construction Management support.
- HECO Support.
- UH West Oahu Temporary Park & Ride final PS&E.



# Original Contract Overview Task 05 Program Management & Deliverables

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs) |
|------|--------------------|-------------------|---------------------------------|--------------------------------|
| 2014 | 2,240              | 1                 | 1,567                           | 1                              |
| 2015 | 1,428              | 0.75              | 763                             | 0.5                            |
| 2016 | 1,438              | 0.75              | 719                             | 0.5                            |
| 2017 | 1,438              | 0.75              | 502                             | 0.25                           |



### Looking forward - 2018 to 2019

- Revenue Service December 2025 (6 year delay increases LOE overall).
- Need to satisfy Programmatic Agreement stipulations in advance of Interim Revenue Service.
- Design Build approach continues to drive additional Design Management & Services.
- Plan is to review the contract and decide whether to re-bid in 2018 for new GEC contract through 2025 (RSD).



# Looking Forward Task 01

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs) |
|------|--------------------|-------------------|---------------------------------|--------------------------------|
| 2018 | 5,520              | 3                 | 19,136                          | 7                              |
| 2019 | 504                | 0                 | 6,414                           | 3                              |



#### **Task 01 Continued Needs**

- Continued support with FTA reporting requirements 1,592 hours.
- Schedule Control 11,900 hours.
- Cost Control 1,586 hours.
- Estimating Services 10,300 hours.

Additional funding needed to support Task 1 services is \$ 3.17M



# Looking Forward Task 03

| Year | Planned<br>(hours) | Planned<br>(FTEs) |        | Actual/<br>Projected<br>(FTEs) |
|------|--------------------|-------------------|--------|--------------------------------|
| 2018 | 1,640              | 1                 | 29,310 | 15                             |
| 2019 | 114                | 0                 | 3,175  | 1.5                            |



#### **Task 03 Continued Needs**

- Continued Environmental & Planning staff augmentation 6,785 hours.
- ROW & Cost-to-Cure Support
- Engage key Subconsultants to support compliance with project's Programmatic Agreement.
  - Hardy Heck Moore Historic Context Studies 6,060 hours
  - Various Subs Education Materials 3,900 hours
  - Fung & Associates Historical Architectural Proposals (Nat'l Historical Register of Properties) –
     1,500 hours
  - Agile 1 Historic Research 1,560 hours
  - Various Subs HALS, HABS/HAERS Nominations 2,392 hours
- FTA Grant Management 1020 hours (Sub).

Additional funding needed to support Task 3 services is \$7.5M



# Looking Forward Task 04

| Year | Planned<br>(hours) | Planned<br>(FTEs) | Actual/<br>Projected<br>(hours) | Actual/<br>Projected<br>(FTEs)* |
|------|--------------------|-------------------|---------------------------------|---------------------------------|
| 2018 | 3,660              | 2                 | 23,262                          | 12                              |
| 2019 | 0                  | 0                 | 6,182                           | 3                               |

\*Actual/Projected (FTEs) include Subconsultant level of effort



#### Task 04 Continued Needs

- Change to Design Build (Eastside) requires Design Support for Responding to RFIs, Evaluating NCRs, Attending Discipline task force meetings, Evaluation of technical issues (6 FTE).
- Final Design Support (4 FTE).
- Traffic Analyses (1 FTE).
- Other Design & Design Studies (1 FTE).
  - Grounding/Corrosion Control
  - HFCO
  - UHWO Park and Ride
  - CCGS Geotech Baseline Report

Additional funding needed to support Task 4 services is \$10.7M



### **Requested Action**

- Approve Contract Change Amendment in the amount of \$14,930,809 to provide project staffing and sub-consultants through April, 2019 (reflects \$3M awarded at December Special Board Meeting).
- HART previously forecasted allocation for this Amendment and sufficient funding is available in the Project budget. No contingency is required to be used for this change.
- This amount is included in the Project Budget of \$8.165 billion.



## Mahalo!



